

## CHAPTER 188 EVALUATE FAR PART 147 AVIATION MAINTENANCE TECHNICIAN SCHOOL FACILITIES, EQUIPMENT, MATERIALS, TOOLS AND RECORDS

### Section 1 Background

#### 1. PTRS ACTIVITY CODES

A. *Maintenance*: 3230

B. *Avionics*: 5230

**3. OBJECTIVE.** This chapter provides guidance for evaluating the facilities, equipment, materials, and tools for an Aviation Maintenance Technician School. Such an evaluation occurs as part of an original certification, addition of a rating, curriculum change, or change of location.

#### 5. GENERAL

##### A. *Definitions*

(1) *Common Hand Tools*: Small, ordinary tools such as ratchets, sockets, etc.

(2) *Instructional Aids*: Equipment used to instruct, such as mock-ups, diagrams, visual aids, aircraft, engines, components, etc.

(3) *Shop Equipment*: Machinery, fabricating devices, spray paint equipment, battery chargers, etc.

(4) *Special Tools*: Highly specialized tools such as tensionometers, micrometers, torque wrenches, etc.

B. *Appropriate Equipment and Facilities.* An Aviation Maintenance Technician School must have instructional equipment and suitable facilities appropriate to the ratings taught and approved by the FAA. Materials and tools must be of a type, quantity, and quality appropriate to the needs of the curriculum and the number of students.

#### 7. PRE-INSPECTION ACTIVITY

A. *Initial Certification.* The certification team will approve the curriculum before formal inspection of the facility. During the Preapplication Meeting, the Certification Project Manager (CPM) may request a briefing and an informal inspection of the facility. The applicant may request that an Aviation Safety Inspector (ASI) informally evaluate the facility to see if it appears to be within the guidelines of the Federal Aviation Regulations. This may be accomplished before completion of the facility, but only after submitting a Preapplication Statement of Intent (PASI).

B. *Added Rating/Curriculum/Location Change.* To add a rating or execute a change in curriculum or location that affects facilities, equipment, materials, or tools, etc., the office manager or airworthiness unit supervisor will determine whether one ASI or a team is necessary to accomplish the site inspection.

(1) To add a rating, see the appropriate sections on changes to curriculum in Vol. 2, Ch. 187, Evaluate FAR Part 147 Aviation Maintenance Technician School's Curriculum/Revision and Instructor Qualifications and the appropriate sections on changes to equipment, materials, tools and records found below.

(2) For changes to curriculum, see curriculum requirements as found in Vol. 2, Ch. 187.

(3) For change in location, the district office must make a detailed analysis of the change in plans and their effect on the following:

- The students in training, whether or not in actual attendance during the time of the change
- Loss of instructional hours as shown in the curriculum. There must not be a loss of instructional hours.
- The school's method of meeting the certification requirements particularly space requirements and curriculum per FAR §§ 147.15 and 147.21

(4) Approval shall be granted to the school in writing.

(5) If a change has been made without approval, the district office shall begin an Enforcement Investigation procedure.

*C. Change of FAA District.* When the location is a change to another FAA district, the application for approval must be directed to the district office that has current certificate responsibility. The originating district office will contact and coordinate directly with the receiving district office. The school maintains the responsibility of the originating district office until the change is approved.

**9. DEMONSTRATION ACTIVITY.** Ensure compliance with regulations as follows:

- Facilities meet the requirements of FAR §§ 147.13 and 147.15
- Instructional aids meet the requirements of FAR § 147.17
- Materials, tools, and shop equipment meet the requirements of FAR § 147.19

**11. FACILITIES.** The instructional equipment, shop equipment, hand tools and physical layout of the building must meet the requirements outlined in FAR §§ 147.15, 147.17, and 147.19. The ASI should keep in mind that the facility must constitute an environment suitable for learning.

*A. Classroom Areas.* An area suitable for classroom instruction may not be suitable for lab and/or shop. With appropriate scheduling and consideration of factors such as ventilation, lighting, noise, and temperature control, an area appropriate for lab and/or shop may be acceptable for classroom instruction.

*B. Shop Environment.* Ventilation must be such that fumes from painting, fueling, degreasing, doping facilities, etc., are properly removed from the immediate work area and are not allowed to pass into other instructional areas.

#### *C. Facility Size and Location*

(1) Facilities must be adequate to hold the number of authorized students participating in any of the shop/lab projects designated for that area.

(2) Facilities must be located and classes scheduled so that students can travel between classes without cutting into instructional time. ASIs should pay special attention to situations in which the students cannot go easily and quickly from one class to another.

### **13. EQUIPMENT**

#### *A. Instructional Equipment*

(1) The instructional aids required in FAR § 147.17 must be appropriate to the scope and depth of the curriculum of the school. The ASI shall determine whether the complexity of instructional aids is appropriate to the specific teaching level of the subject item.

(2) In some situations, the school may choose to use active aircraft for instructional purposes in the shop. This is permissible as long as the aircraft is on the premises at the time of instruction. The ASI shall remind the school that active aircraft used to comply with FAR §§ 147.17(a)(2) and (d) become part of the approved instructional equipment and must be available as specified in FAR § 147.37.

(3) The ASI shall ensure compliance with requirements for the ratio of instructional equipment to students in each

shop course. FAR § 147.17(2)(c) requires that not more than eight students may work at any one unit of equipment at a time. However, the ASI may determine whether eight students are too many to complete a certain project safely and competently, such as live aircraft that are used for the demonstration of gear retraction systems.

#### B. *Shop Equipment*

(1) The ASI must determine if enough equipment is in place and in satisfactory operating condition to serve the student enrollment adequately and meet shop project requirements.

(2) The equipment must be located so that it can be operated in a safe and efficient manner. Large standing equipment must be installed securely. Large pieces of equipment should be placed to provide sufficient aisle space so that the students can move about freely. The ASI must determine if the floor is free from clutter and items such as extension cords.

**15. MATERIALS.** The school must have sufficient materials in stock and properly stored to provide for the approved student enrollment. In order to ensure adequate instruction, the amount and variety of stocks should directly reflect the requirements of the curriculum.

#### 17. TOOLS

A. *Tool Standards.* For subjects taught at Level 3, all tools required to meet “return to service” standards must be in satisfactory working condition and of the proper kind for their intended purpose. FAR § 147.19 requires the school to have an adequate supply of materials and tools appropriate to the curriculum of the school.

B. *Student Hand Tool Policy.* The school may either provide common hand tools or require students to furnish their own. In either case, the school must establish a policy on provision of common hand tools. Any tools that the school requires the student to furnish must be listed in the curriculum. The school will furnish special tools, such as cylinder hold down wrenches, micrometers, etc.

### Section 2 Procedures

#### 1. PREREQUISITES AND COORDINATION REQUIREMENTS

##### A. *Prerequisites*

- Knowledge of the regulatory requirements of FAR Parts 43, 65 and 147, including Appendices A, B, C, and D
- Previous experience with certification or surveillance of FAR Part 147 schools is desirable

B. *Coordination.* This task requires coordination with Avionics ASIs and certification team members, as appropriate.

#### 3. REFERENCES, FORMS AND JOB AIDS

##### A. *References*

- Order 8300.5, Aviation Safety Inspector, General Aviation Job Function Reference Guide, as amended
- The school curriculum

##### B. *Forms*

- FAA Form 8310-6, Aviation Maintenance Technician School Certificate and Rating Application
- FAA Form 8000-4, Air Agency Certificate (for initial certification)

C. *Job Aids.* None.

## 5. PROCEDURES

A. *Review the Applicant's File.* Before inspecting the facility, review the applicant's application and district office file. Check for any previous violation history. Review previous correspondence. Check the curriculum or proposed curriculum for currency. Take a copy of the curriculum and facility layout to the school site.

B. *Inspect the Facility.* Compare the curriculum against the instructional aids, shop equipment and hand tools at the site. Compare the physical layout with the facility layout plan.

(1) Check the instructional aids for agreement with the curriculum. Determine if the items required for each course are actually at the site as required by the approved student level.

(2) Determine whether all instructional aids are actually operable and safe to use. For example, a retractable landing gear instruction device should operate properly.

(3) Ensure that adequate stocks of operational/maintenance instructions, parts manuals, and technical data are at the site, according to the requirements of the curriculum.

(4) Determine if the number and size of classrooms and shop areas are consistent with the facility layout submitted with the curriculum. Ensure that the lighting and ventilation are adequate.

(5) Verify that the tools, materials, and shop equipment match the inventories/descriptions required by the curriculum. Ensure that these items are stored properly.

(6) Verify that a record keeping system is in place for tool inventory, calibration, and the updating of technical instructional materials.

(7) Inform the applicant of any discrepancies noted. Make a record of such deficiencies in the remarks section of FAA Form 8310.6, as appropriate.

## 7. TASK OUTCOMES

A. *Complete a PTRS Transmittal Form*

B. *Facility Approved*

(1) For an initial certification or added rating, complete FAA Form 8310.6, as applicable. Attach the appropriate documents, as required. Make a copy of the form and all pertinent documents and retain a copy for the district office file.

(2) For a curriculum or location change that affects facilities, equipment or tools, complete FAA Form 8310.6, as applicable. Retain a copy of the form for the district office file.

C. *Facility Disapproved*

(1) Mark FAA Form 8310-6 disapproved and return to the applicant with attachments. Retain a copy for the office file.

(2) Write a letter to the applicant stating the reasons for disapproval. Advise applicant to resubmit a new application when the discrepancies are corrected. Upon receipt of a new application, re-schedule the facility inspection.

**9. FUTURE ACTIVITIES.** Routine surveillance.